

# **EPITAXIAL PLANAR PNP TRANSISTORS**

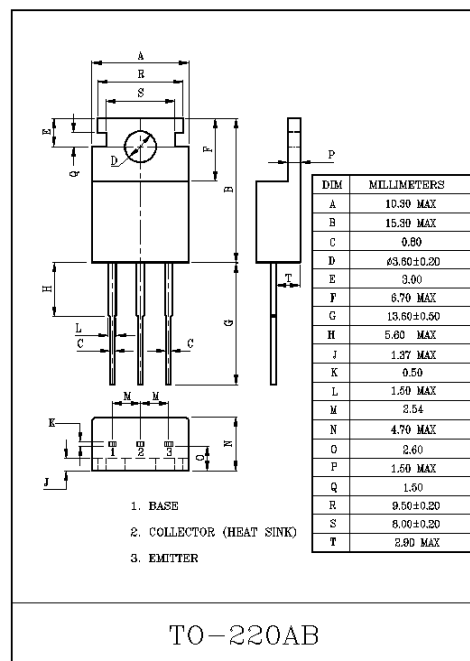
GENERAL PURPOSE APPLICATION.

## FEATURES

- Complementary to TIP41C.

## MAXIMUM RATINGS (Ta=25℃)

| CHARACTERISTIC              |          | SYMBOL    | RATING  | UNIT |
|-----------------------------|----------|-----------|---------|------|
| Collector-Base Voltage      |          | $V_{CBO}$ | -100    | V    |
| Collector-Emitter Voltage   |          | $V_{CEO}$ | -100    | V    |
| Emitter-Base Voltage        |          | $V_{EBO}$ | -5      | V    |
| Collector Current           | DC       | $I_C$     | -6      | A    |
|                             | Pulse    | $I_{CP}$  | -10     |      |
| Base Current                |          | $I_B$     | -2      | A    |
| Collector Power Dissipation | (Ta=25℃) | $P_C$     | 2       | W    |
|                             | (Tc=25℃) |           | 65      |      |
| Junction Temperature        |          | $T_j$     | 150     | ℃    |
| Storage Temperature Range   |          | $T_{stg}$ | -55~150 | ℃    |



## ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC                       | SYMBOL         | TEST CONDITION                              | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|----------------|---------------------------------------------|------|------|------|------|
| Collector Emitter Sustaining Voltage | $V_{CEO(SUS)}$ | $I_C = -30mA, I_B = 0$                      | -100 | -    | -    | V    |
| Collector Cut-off Current            | $I_{CEO}$      | $V_{CE} = -60V, I_B = 0$                    | -    | -    | -0.7 | mA   |
| Collector Cut-off Current            | $I_{CES}$      | $V_{CE} = -100V, V_{EB} = 0$                | -    | -    | -400 | μA   |
| Emitter Cut-off Current              | $I_{EBO}$      | $V_{BE} = -5V, I_C = 0$                     | -    | -    | -1   | mA   |
| DC Current Gain                      | $h_{FE}$       | $V_{CE} = -4V, I_C = -0.3A$                 | 30   | -    | -    |      |
|                                      |                | $V_{CE} = -4V, I_C = -3A$                   | 15   | -    | 75   |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$  | $I_C = -6A, I_B = -600mA$                   | -    | -    | -1.5 | V    |
| Base-Emitter On Voltage              | $V_{BE(on)}$   | $V_{CE} = -4V, I_C = -6A$                   | -    | -    | -2.0 | V    |
| Transition Frequency                 | $f_T$          | $V_{CE} = -10V, I_C = -500mA$<br>$f = 1MHz$ | 3.0  | -    | -    | MHz  |

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